REMARKS

The above preliminary amendments and following remarks are submitted in accordance with a Request for Continued Examination filed on even date and in response to the Final Official Action of the Examiner mailed on mailed August 13, 2004. This amendment is deemed to fully respond to all objections and rejections of the Examiner. Thus, originally presented claims 1-20, along with newly presented claims 21-25, being all pending claims, are now expected to be in condition for allowance. Entry of this amendment and reconsideration to that end is respectfully requested.

After having apparently approved the drawings earlier in the prosecution of the present application, the Examiner has now objected to Figs. 2, 4-9, and 12. Applicants have herewith submitted an amended drawings in response to the Examiner's objection. The modification to these drawings involved the addition of textual descriptions of drawing elements taken directly from the specification as originally filed. No new matter has been added.

The Examiner has rejected claim 1 as being unpatentable over U.S. Patent No. 6,201,536, issued to Hendricks et al (hereinafter referred to as "Hendricks") in view of U.S. Patent No. 4,636,942, issued to Chen et al (hereinafter referred to as "Chen"). This

ground of rejection is respectfully traversed as to amended claim 1 for the reasons provided below.

As has been previously explained and is highlighted throughout the specification and drawings, it is critical to Applicants' invention to employ an overall video on demand system architecture which promotes efficiency and modularity. Efficiency is greatly enhanced by handling the input/output intensive video streaming function with one or more relatively simply video processors, and assigning the remainder of the data processing functions to a relatively versatile and complex large scale computer. Modularity is enhanced by this approach, because the additional input/output intensive video streams arising from an increased subscriber base are easily accommodated through the addition of more video processors.
The load on the transaction processor, on the other hand, will be most increased by additional functionality, which is accommodated in a normal data processing approach by adding memory, instruction processors, and application software.

The Examiner has admitted that Hendricks utilizes a single processor, File Server 215, to handle functions of both Applicants' claimed "transaction processor" and "video processor". For that reason, he has cited Chen which shows a multiple processor architecture and has stated:

> Therefore, it would have been obvious to one of
> ordinary skill in the art at the time the invention was

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> made to modify Hendricks' file server 215 with a plurality (sic) processors, as taught by Chen, <u>so each processor could be configured to operate independently</u> whereby independent taks of different jobs may be performed, thereby avoids (sic) the problems of underutilization and provide a higher system throughput. (Emphasis added)

This statement is both clearly erroneous as a matter of fact, and irrelevant as a matter of law.

This statement is clearly erroneous because even though it is conceivable that the processors of Chen could operate independently, Chen actually teaches cluster processing whereby a plurality of processors is utilized to perform a single task, rather than operating independently. Column 6, lines 16-18, states:

> This architecture allows a cluster of K processors to be assigned to perform a single task....

Thus, it is clear that Chen does not teach independent operation as found by the Examiner.

More importantly, Applicants have claimed a system having a transaction processor which performs certain functions and one or more video processor(s) which perform entirely different functions. It is this specific claimed "division of labor" (i.e., transaction processor spools and video processor streams) which is critical to providing the claimed efficiency and modularity.

Nevertheless, to further highlight this distinction for the Examiner, claims 1, 6, 11, and 16 have been herein amended to

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require that the transaction processor and video processor have different architectures, along with the previously claimed different functions. This is readily distinguishable from Chen which states at column 5, line 50, which states:

Processors 10 and 11 are identical.....

Though the Examiner has already assembled a number of prior art references, he has failed to show the architectural innovations which characterize the present invention.

Furthermore, in rejecting claim 1, the Examiner alleges that Hendricks "streams said spooled requested video data from said video server memory to said plurality of subscriber receivers in a plurality of streams spaced apart by a predetermined time". The Examiner admits that this finding is clearly erroneous. Hendricks only provides one stream from each copy of video program data. The Examiner agrees in stating:

> "Hendricks does not clearly discloses (sic) "which
> streams (transmits/emits) said spooled video program to
> said two subscribing television receivers as _**two**
> **separate spaced apart streams**_ from said copy of said
> video program spacd apart by time period"

Thus, the rejection of claim 1, and all claims depending therefrom is respectfully traversed.

The Examiner has rejected claims 2-5 under 35 U.S. C. 103(a) as being unpatentable over Hendricks in view of Chen and further in view of Unisys Cellular Multiprocessing Architecture White Paper pages 1-8 (hereinafter referred to as "Unisys"). This

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rejection is respectfully traversed for the reasons provided above.

The Examiner has not established a publication date of record for "Unisys" which has a copyright date of 1999. This problem is exacerbated because, it is not clear whether the Examiner considers the reference to be enabling of that for which it is cited or merely evidence of a commercial system which the Examiner is relying upon for his rejection. This confusion arose because the Examiner submitted a press release of Unisys dated May 13, 1998 which announces an expected date of product release of the Unisys CMP system sometime during 1999. Thus, it is not clear whether the alleged prior art relied upon is not prior art at all, or whether the Examiner has placed reliance upon prior art which Applicants can swear behind. Out of an abundance of caution and until the Examiner clarifies his position, Applicants respectfully traverse this rejection as not based upon established prior art.

Claims 6, 11, 12, 13, 15, 17, and 18 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks in view of U.S. Patent No. 5,935,206, issued to Dixon et al (hereinafter referred to as "Dixon"). This ground of rejection is respectfully traversed. As to the amended claims, the above argument regarding architecture is deemed pertinence.

Furthermore, the Examiner has refused to comply with MPEP 2143 to establish *prima facie* obviousness of the alleged combination of Hendricks and Dixon. He has not even attempted to show evidence of "reasonable likelihood of success", because he could not do so. The approach of Hendricks and Dixon are incompatible.

In addition, the Examiner does not show evidence of motivation as required, but simply makes a conclusory statement. With regard to claim 6, for example, the Examiner states:

> Thus Dixon reads on "two separate spaced apart stream (sic) from the copy of the video program" (Col. 3, lines (sic) 20-Col. 4, lines (sic) 65). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hendricks with Dixon to automatically tailors (sic) the number of copies of movies and allocated bandwidths to viewer requirements and to provide requesters promptly (sic) access to movies (Col. 2, lines 1-7).

This is precisely the unsupported conclusion attacked by the Court of Appeals for the Federal Circuit stating in part:

> Broad conclusory statements regarding the teaching of multiple references, standing alone, are not "evidence". *In re Dembiczak*, 175 F.3d 994, 50 U.S.P.Q. 2d 1614 (Fed. Cir. 1999.

In fact, Hendricks and Dixon are incompatible because they provide alternative and incompatible solutions to the problem of multiple asynchronous requesters of the same program. Therefore, there cannot be any motivation for the alleged combination.

Hendricks handles multiple asynchronous requests for the same program by providing a single stream of video from a single

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copy of the program in response to all requests falling within each five minute time window. This approach to solving the problem reduces input/output bandwidth by increasing memory requirements (i.e., requires a separate program copy for each active five minute window). Dixon, on the other hand, initiates a separate stream from the same copy of the program for each request without regard to the timing. Thus, Dixon reduces memory requirements (i.e., only one copy is required) by greatly increasing input/output loading. It should be readily apparent to anyone of skill in the art that these are radically different and incompatible approaches.

Applicants' invention as disclosed and claimed is the much superior approach. Unlike Dixon, Applicants reduce input/output bandwidth by providing a single stream to a plurality of requesters within a time window (i.e., one minute in the preferred mode). Unlike Hendricks, Applicants reduce memory requirements by providing multiple streams from a single memory copy of the program.

Thus, the rejection of claims 2-5 is respectfully traversed for failure of the Examiner to provide evidence of a *prima facie* case of obviousness. Furthermore, as explained above, Applicants' disclosed and claimed approach is demonstrably superior to Hendricks, Dixon, or the alleged combination thereof.

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In rejecting claims 11-13, the Examiner relies upon the alleged combination of Hendricks and Dixon without meeting the requirements of MPEP 2143 as explained above. Furthermore, claim 11, as amended, is further distinguishable over the prior art of record for the reasons explained above with regard to the rejection of claim 1. Therefore, the rejections of claims 11-13 are respectfully traversed.

In rejecting claims 16-18, the Examiner repeats the same errors with respect to the rejection of claims 11-13. These rejections are respectfully traversed for similar reasons.

Claims 7-10 and 14-15 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks in view of Dixon and further in view of Unisys. This ground of rejection is respectfully traversed for failure of the Examiner to present a *prima facie* case of obviousness as required by MPEP 2143 as discussed above. Furthermore, the rejection is respectfully traversed for failure of the Examiner to establish that Unisys is prior art to the present invention as explained above. The rejections of claims 7-10 and 14-15 are respectfully traversed.

Claims 19-20 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks in view of Dixon and further in view of U.S. Patent No. 5,815,662, issued to Ong (hereinafter referred to a "Ong"). To the incompatible streaming approaches of Hendricks and Dixon, the Examiner alleges combination with the

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mutually incompatible approach of Ong. He has done so without meeting the requirements of MPEP 2143 to establish a *prima facie* case of obviousness. Therefore, the rejection of claims 19-20 is respectfully traversed.

Newly presented claims 21-25, though of somewhat different scope, are deemed patentable for similar reasons. As with claims 1-20, newly presented claims 21-25 are fully supported by the specification and drawings.

Having thus responded to each objection and ground of rejection, Applicants respectfully request entry of this amendment and allowance of claims 1-25, being the only pending claims.

Respectfully submitted,

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By their attorney,

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